

CLAIMS

1. A method for inducing antigen-specific T cell tolerance *in vivo* comprising administering to a subject
- 5 a) a cell which presents antigen to a T cell and has a ligand on a cell surface which interacts with a receptor on the surface of the T cell which mediates contact-dependent helper effector function; and
- b) an antagonist of the receptor on the surface of the T cell which inhibits interaction of the ligand with the receptor.
- 10 2. The method of claim 1, wherein the receptor on the surface of a T cell which mediates contact-dependent helper effector function is gp39.
3. The method of claim 2, wherein the antagonist is an anti-gp39 antibody.
- 15 4. The method of claim 1, wherein the cell is a resting B cell.
5. The method of claim 4, wherein the B cell is contacted with antigen prior to administration.
- 20 6. The method of claim 1, wherein the cell is an allogeneic B cell.
7. A method for inducing antigen-specific T cell tolerance *in vivo* comprising administering to a subject
- 25 a) a cell which presents antigen to a T cell and has a ligand on a cell surface which interacts with gp39 on the surface of the T cell; and
- b) an antagonist of gp39.
- 30 8. The method of claim 7, wherein the antagonist is an anti-gp39 antibody.
9. The method of claim 8, wherein the anti-gp39 antibody is a monoclonal antibody.
- 35 10. The method of claim 9, wherein the anti-gp39 antibody is an anti-human gp39 antibody.
11. The method of claim 9, wherein the anti-gp39 antibody is MR1.

12. The method of claim 8, wherein the anti-gp39 antibody is a chimeric monoclonal antibody.

13. The method of claim 8, wherein the anti-gp39 antibody is a humanized monoclonal antibody.

14. The method of claim 7, wherein the antagonist is a soluble form of CD40.

15. The method of claim 14, wherein the soluble form of CD40 is a fusion protein.

16. The method of claim 7, wherein the cell is a resting B cell.

17. The method of claim 16, wherein the B cell is contacted with antigen prior to administration.

18. The method of claim 17, wherein the antigen is a protein.

19. The method of claim 18, wherein the protein is an allergen.

20. The method of claim 18, wherein the protein is an autoantigen.

21. The method of claim 7, wherein the cell is an allogeneic B cell.

22. The method of claim 7, wherein the cell is in peripheral blood.

23. The method of claim 7, wherein the cell is in allogeneic bone marrow.

24. A method for inducing antigen-specific T cell tolerance *in vivo* comprising administering to a subject

- a) a B cell which presents antigen to a T cell;
- b) an antigen associated with the B cell; and
- c) an anti-gp39 antibody.

25. The method of claim 24, wherein the anti-gp39 antibody is a monoclonal antibody.

26. The method of claim 25, wherein the anti-gp39 antibody is an anti-human gp39 antibody.

27. The method of claim 25, wherein the anti-gp39 antibody is MR1.

28. The method of claim 24, wherein the antigen is a protein.

5 29. A method for inducing T cell tolerance to allogeneic cells *in vivo* comprising administering to a subject

- a) an allogeneic cell which presents antigen to a T cell; and
- c) an anti-gp39 antibody.

10 30. The method of claim 29, wherein the anti-gp39 antibody is a monoclonal antibody.

31. The method of claim 30, wherein the anti-gp39 antibody is an anti-human gp39 antibody.

15 32. The method of claim 30, wherein the anti-gp39 antibody is MR1.

33. A method for inducing T cell tolerance to a bone marrow transplant *in vivo* comprising administering to a subject

- 20
- a) allogeneic bone marrow; and
 - b) an anti-gp39 antibody.

25 34. The method of claim 33, wherein the anti-gp39 antibody is a monoclonal antibody.

35. The method of claim 34, wherein the anti-gp39 antibody is an anti-human gp39 antibody.

30 36. The method of claim 34, wherein the anti-gp39 antibody is MR1.

37. A method for inhibiting graft-versus-host disease comprising administering to a subject

- a) allogeneic bone marrow; and
- b) an anti-gp39 antibody.

35 38. The method of claim 37, wherein the anti-gp39 antibody is a monoclonal antibody.

39. The method of claim 38, wherein the anti-gp39 antibody is an anti-human gp39 antibody.

40. The method of claim 38, wherein the anti-gp39 antibody is MR1.

41. A method for inducing antigen-specific T cell tolerance comprising contacting a T cell with:

- a) a cell which presents the antigen to the T cell and has a ligand on a cell surface which interacts with gp39 on the surface of the T cell; and
- b) an antagonist of gp39.

42. The method of claim 41, wherein the antagonist is an anti-gp39 antibody.

43. The method of claim 42, wherein the anti-gp39 antibody is a monoclonal antibody.

44. The method of claim 42, wherein the anti-gp39 antibody is an anti-human gp39 antibody.

45. The method of claim 42, wherein the anti-gp39 antibody is MR1.

46. The method of claim 41, wherein the antagonist is a soluble form of CD40.

47. The method of claim 46, wherein the soluble form of CD40 is a fusion protein.

48. The method of claim 41, wherein the cell is a lymphoid cell.

49. The method of claim 48, wherein the lymphoid cell is a resting B cell.

50. The method of claim 41, wherein the antigen is an allergen.

51. The method of claim 41, wherein the antigen is an autoantigen.

53. The method of claim 41, wherein the antigen is an alloantigen.

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